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5/2/90

SCREENING SITE INSPECTION REPORT
FOR
SWIFT AG CHEM--FAIRMONT CITY PLANT
AKA ESTECH BRAND FERTILIZER
U.S. EPA ID: ILD059995423
SS ID: NONE
TDD: F05-8612-077
PAN: FIL0055SB

MAY 2, 1990

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International Specialists in the Environment

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MEMORANDUM

DATE: November 7, 1989

TO: William Messenger, Chief Pre-Remedial Unit

FROM: Jerome D. Oskvarek, FIT Office Manager

SUBJECT: Screening Site Inspection Transmittal Memorandum

CERCLIS Site Name: Swift Ag Chem - Fairmont City Plant (Block

City: East St. Louis

State: Illinois

U.S. EPA ID No.: ILD059995423

SSID No.: None

TDD No.: F05-8612-077

PAN: FIL00555B

THIS DOCUMENT IS CONFIDENTIAL. Due to the predecisional nature of this memorandum, this memorandum and its attachments are not to be released. The draft/final (circle) Screening Site Inspection (SSI) report accompanies this transmittal memorandum and its attachments. Based on the information gathered during the SSI and other available information, the FIT has recalculated the preliminary and projected HRS 1 scores. These scores and factor values are presented below.

KM

TM 6-17

SIGNATURE PAGE
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Prepared by: Karen M Spangler for RB Date: May 25, 1990
Karen M. Spangler for Regina Bayer
FIT Team Leader
Ecology and Environment, Inc.

Reviewed by: _____ Date: July 5 1990
Tim Mayers
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Ecology and Environment, Inc.

Approved by: _____ Date: 5/29/90
Jerome D. Oskvarek
FIT Office Manager
Ecology and Environment, Inc.

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1. INTRODUCTION

Ecology and Environment, Inc., Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the Swift Ag Chem--Fairmont City Plant aka Estech Brand Fertilizer (Swift Ag) site under contract number 68-01-7347.

The site was initially identified to U.S. EPA when it was included on the Waste Disposal Site Survey presented in October 1979 to the Subcommittee on Oversight and Investigation of the Committee on Interstate and Foreign Commerce, 96th Congress. The site was included in the Illinois portion of this survey. The survey is commonly referred to as the Eckhardt Report.

The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by Kenneth L. Page of the Illinois Environmental Protection Agency (IEPA). The PA is dated April 4, 1986.

FIT prepared an SSI work plan for the Swift Ag site under technical directive document (TDD) F05-8612-077, issued on December 18, 1986. The SSI work plan was approved by U.S. EPA on June 1, 1989. The SSI of the Swift Ag site was conducted on August 2, 1989, under amended TDD F05-8612-077, issued on June 1, 1989.

The FIT SSI included an interview with site representatives, a reconnaissance inspection of the site, and the collection of 12 soil/sediment samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.
>
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI. (U.S. EPA 1988)

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section includes information obtained from SSI work plan preparation; the site representative interview; federal, state, and local file information reviewed by FIT; and a reconnaissance inspection of the site.

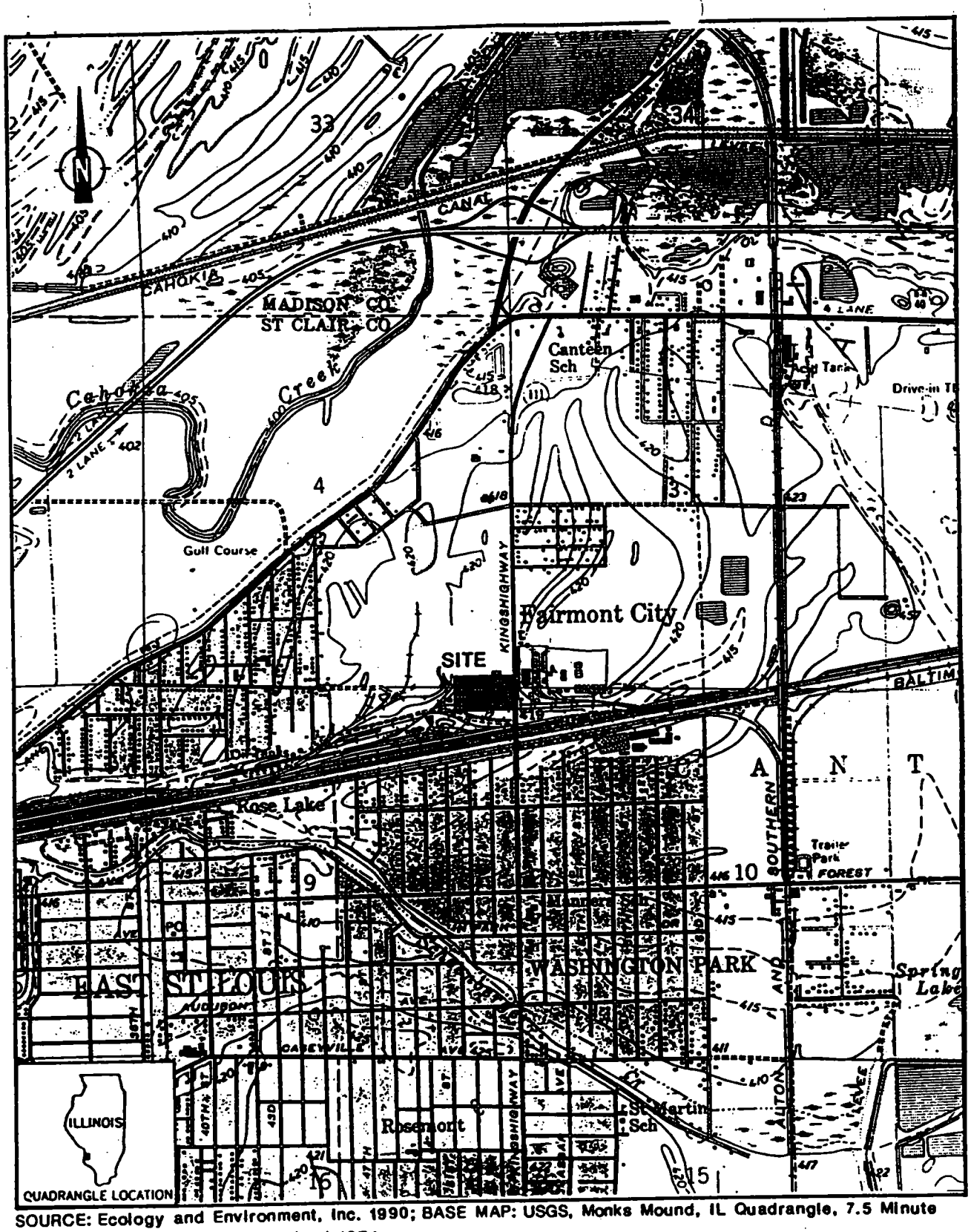
2.2 SITE DESCRIPTION

The Swift Ag site is located on approximately 10 acres of land on Kingshighway (SE1/4SE1/4 sec. 4, T.2N., R.9W.), south of Fairmont City, Illinois, in St. Clair County (see Figure 2-1 for site location). The city of East St. Louis, Illinois, lies approximately 1 mile southwest of the site. Rose Creek and Penn Central railroad tracks run adjacent to the site on its south side. A 4-mile radius map of the Swift Ag site is provided in Appendix A.

The Swift Ag site is an active chemical processing facility that currently produces fertilizers. Raw materials utilized at the site include potash, anhydrous ammonia, sulfuric acid, and phosphoric acid. Raw materials are brought in by truck or railroad and are dry-mixed and blended on-site prior to packaging and shipping of the fertilizers off-site. Both solid and liquid materials are used at the site. A wet scrubber, to control fine-particle air emissions, is present on-site.

2.3 SITE HISTORY

A fertilizer manufacturing facility has been in existence on the site property since 1931. The original owner of the facility was



SOURCE: Ecology and Environment, Inc. 1990; BASE MAP: USGS, Monks Mound, IL Quadrangle, 7.5 Minute Series, 1954, photorevised 1974.

SCALE
0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION

Virginia Carolina Chemical Company. Subsequent owners have included Mobil Chemical Company (1967 to 1971), Swift and Company (1971 to 1983), and Beatrice, Inc. (1983 to 1986). During Swift and Company's ownership of the site property, the facility had several corporate names, including Swift Agricultural Chemicals Corporation, Esmarck, and Estech General Chemicals Corporation. The current owner of the facility is Vigoro industries (britt 1989).

File information indicates that the site has always been operated as a fertilizer production facility. Products currently produced at the facility include golf course, lawn, and garden fertilizers. Pesticides have been blended with the fertilizers produced since 1971 (Britt 1989).

Currently only dry-mix blending occurs at the site. However, in the past, the facility utilized both solid and liquid raw materials in a granulation process for fertilizer formation. A lightweight motor oil is currently added to the product to control fugitive dust (Britt 1989).

Previous waste disposal practices at the site have included the use of a reservoir and a settling basin for the deposition of slurry from the wet scrubber. The 1,000-gallon capacity reservoir was constructed of concrete, but was open to the atmosphere. Eventually, the reservoir was filled and its use was discontinued (Britt 1989).

Deposition of wet scrubber slurry in the settling basin occurred from early 1973 until mid 1975. The settling basin was lined with a naturally occurring clay layer. After use of the settling basin was discontinued, the area was excavated. The excavated material was deposited in the old reservoir and the settling basin area was covered with cinders (Britt 1989).

Several complaints have been received by IEPA concerning waste spills at the Swift Ag site. On August 21, 1973, the U.S. Coast Guard reported to IEPA that an unknown quantity of white material had been discharged from the Swift Ag site into Rose Creek, which runs along the southern boundary of the site. The discharge occurred when a sulfuric acid tank was being emptied and cleaned to repair a leak (Merz 1973). It was estimated that between 2,000 and 3,000 gallons of sulfuric acid and water were discharged to Rose Creek as a result of the spill (Britt 1989).

On March 3, 1975, an IEPA biologist working in the area of the Swift Ag site observed that water in a drainage ditch adjacent to the site's northern border was green. A conversation between IEPA representatives and the Swift and Company Plant Manager revealed that the green color was caused by a dye used to color fertilizer. The Plant Manager indicated that surface water runoff from the plant area into the drainage ditch occasionally caused the green color in the water (Merz 1975).

In 1985, a spill of approximately 1,000 gallons of oil allegedly occurred when a tank valve was mistakenly opened and oil leaked into Rose Creek. The spill was apparently cleaned up and the cleanup was inspected by IEPA representatives (Britt 1989).

Currently operations at the facility are permitted under IEPA operating permit #72100690, issued on July 17, 1989. The permit expires on July 17, 1991.

No enforcement actions are known to have occurred or are currently pending concerning the Swift Ag site.

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI of the Swift Ag site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures. Rationales for specific FIT activities are also provided. The SSI was conducted in accordance with the U.S. EPA-approved work plan.

The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the Swift Ag site is provided in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

Regina Bayer, FIT team leader, conducted an interview with Robert Britt, Plant Manager for Vigaro Industries, on August 2, 1989, at 8:30 a.m. at the Swift Ag site. Scott Slagley, Hydrogeologist with Environmental Strategies Corporation, and Richard Fields, an attorney with Arnold & Porter, were in attendance at the interview on behalf of Vigaro Industries. Dan Sullivan of FIT was also present at the interview. The interview was conducted to gather information that would aid FIT in conducting SSI activities.

3.3 RECONNAISSANCE INSPECTION

On August 2, 1989, FIT conducted a reconnaissance inspection of the Swift Ag site and surrounding area in accordance with Ecology and Environment, Inc. (E & E), health and safety guidelines. The reconnaissance inspection was begun at 9:45 a.m. Britt, Slagley, Fields, and Thomas Miller of IEPA accompanied FIT during the reconnaissance

inspection. The reconnaissance inspection included a walk-through of the site to determine appropriate health and safety requirements for conducting on-site activities and to make observations to aid in characterizing the site. FIT also determined exact sampling locations during the reconnaissance inspection.

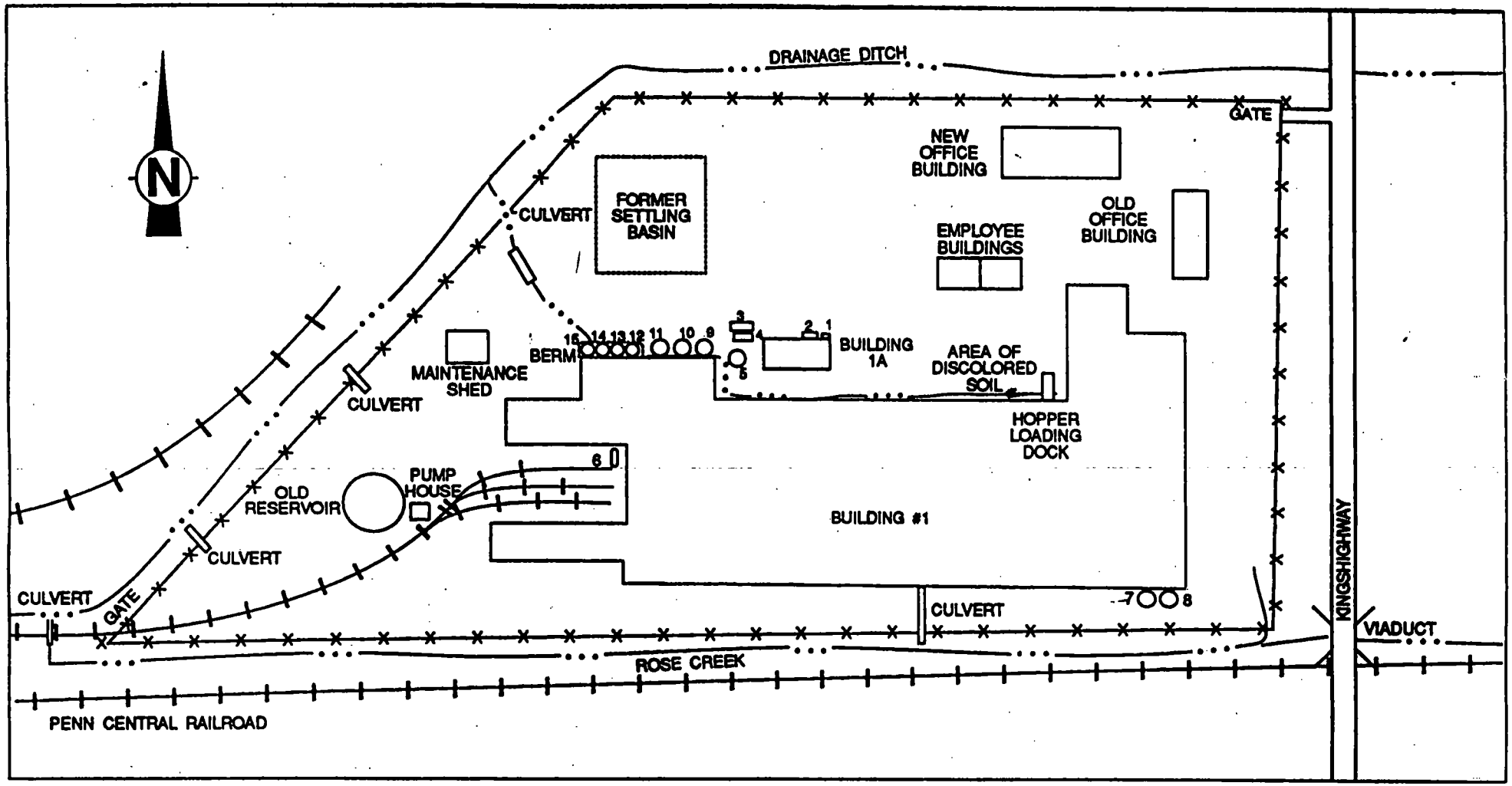
Reconnaissance Inspection Observations. The Swift Ag site is located south of Fairmont City, Illinois, on Kingshighway. The surrounding area is lightly industrialized. Other industries are located to the north, south, and east of the site. Railroad tracks and an open field are located to the west of the site.

The site area consists of seven buildings and fifteen chemical and oil storage tanks scattered throughout the property (see Figure 3-1 for locations of site features). The majority of the site area is covered by building #1, which houses most of the plant operations. Building #1, constructed of concrete and wood, appeared to be in very poor condition. In several locations FIT observed planks missing from portions of the building's walls. A hopper loading dock is located near the northeast corner of building #1. FIT observed areas of discolored soil near the hopper loading dock.

The main entrance to the site is located at the northeast corner and provides access from Kingshighway. An old office building, not currently used, is located near this entrance. A new office building is also located near this entrance. Two small employee buildings are located near building #1, in the northeast portion of the site.

Building #1A is located adjacent to building #1, to the north. A former oil tank (1), now empty, and a 10,000-gallon fuel oil tank (2) are located just north of building #1A. A 30,000-gallon anhydrous ammonia tank (3) and a 12,000-gallon sulfuric acid tank (4) are located at the northwest corner of building #1A, and a water tank (5) is located to the west of the building. The anhydrous ammonia and sulfuric acid tanks were both empty at the time of the SSI.

Seven additional tanks are located at the northwest corner of building #1. Three of the tanks (9, 10, and 11) are silos that have been empty since Swift and Company's ownership of the site. Four other tanks (12, 13, 14, 15), also located on the northwest corner of building #1, are surrounded by an earthen berm approximately 3 feet high. Tank



SOURCE: Ecology and Environment, Inc. 1990.

SCALE

0 200 400 600 800 1,000 FEET

LEGEND

1-15 TANKS

FIGURE 3-1 SITE FEATURES

12 was empty at the time of the site inspection, and its former use was unknown. Tanks 13 and 14 were once used to hold phosphoric acid, but were also empty. Tank 15 has a capacity of 12,000 gallons and is currently used for storage of dust-suppressant oil. A small maintenance shed is located to the northwest of building #1.

The location of the former settling basin is the northwest corner of the site. When use of the settling basin was discontinued, material from this area was excavated and deposited into the old reservoir, located to the west of building #1. The settling basin area was then covered with cinders. FIT observed an area of discolored soil near the location of the former settling basin.

The abandoned reservoir, into which the excavated material from the settling basin was placed, had a capacity of 1,000 gallons and had a concrete floor, but was open at the top. The reservoir has been partially filled with fertilizer slurry waste. Some fill material has since been bulldozed over the edge of the reservoir, mostly covering the waste. Portions of the filled-in reservoir are vegetated.

A propane tank (6) and several railroad spurs are located adjacent to building #1 on the west. Two additional propane tanks (7 and 8) are located at the southeast corner of building #1. An old pumphouse, containing a nonfunctioning well, is located between the old reservoir and the railroad spurs.

Several ditches were observed on-site during the reconnaissance inspection. A ditch containing greenish-tinted standing water was observed adjacent to building #1. This ditch runs from east to west along the north side of building #1, between the tanks and building #1, and then passes through a culvert before exiting the property near the northwest corner of the site.

A second ditch was observed at the southeast corner of the site. This ditch, which also contained greenish-tinted standing water, exits the site at the southeast corner and joins with Rose Creek. Rose Creek flows adjacent to the site's southern boundary between the site and the Penn Central railroad tracks.

Another drainage ditch was observed adjacent to the site on its north and west sides. The on-site ditch that exits the site at the northwest corner joins with this off-site ditch as it flows along the

vest side of the site. This ditch also contains greenish-tinted water. Rose Creek passes through a concrete culvert and then joins with this ditch at the southwest corner of the site. These ditches, as well as Rose Creek, all appear to be manmade drainage ditches.

Additional culverts were observed at several locations on the west and south perimeters of the site. These culverts consisted of pipes that passed underneath the site fence.

The site is completely fenced. Two gates are present to allow access to the site: one at the entrance to the site from Kingshighway (northeast entrance) and one across the railroad spurs located at the southwest corner of the site. Photographs of the Swift Ag site are provided in Appendix C.

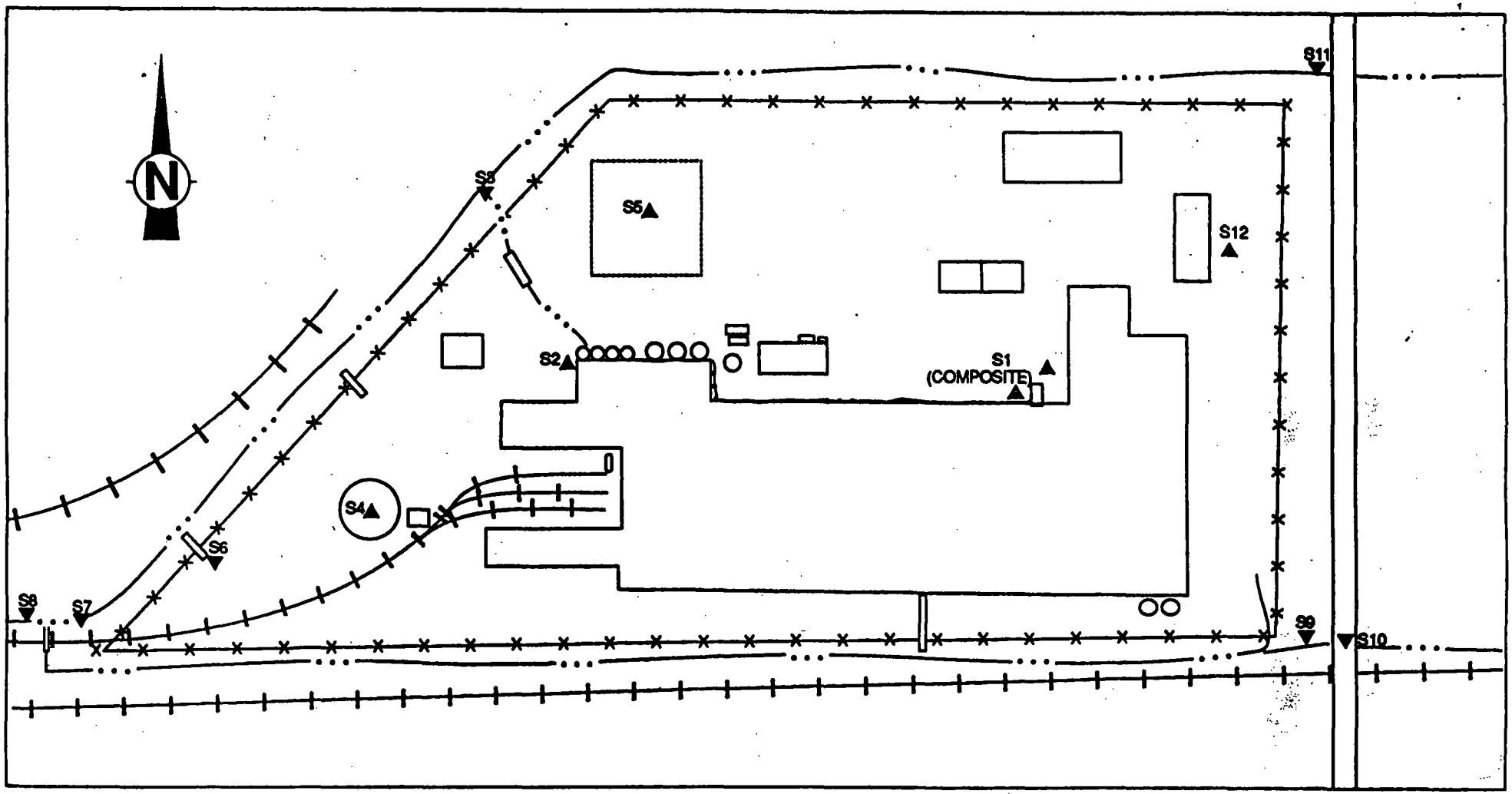
3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine whether U.S. EPA Target Compound List (TCL) compounds and U.S. EPA Target Analyte List (TAL) analytes were present at the site. The TCL and TAL, with corresponding quantitation/detection limits, are provided in Appendix D.

On August 2, 1989, FIT collected 12 soil/sediment samples, including one potential background soil sample. The site representatives did not accept offered portions of the FIT-collected samples.

Soil/Sediment Sampling Procedures. On-site soil/sediment samples S1, S2, S4, S5, and S6 were collected to determine whether TCL compounds and/or TAL analytes were present in soils and sediments at the Swift Ag site.

Soil sample S1 was a composite surface sample collected from two areas of stained soil located near the hopper loading dock adjacent to building #1 (see Figure 3-2 for soil/sediment sampling locations). Surface soil sample S2 was obtained from the area between building #1 and tank 15 (dust suppressant oil). Soil sample S4 was collected at a depth of approximately 6 inches from within the old reservoir. This sample was composed mainly of fertilizer slurry waste. Surface soil sample S5 was obtained from discolored soil in the area of the former settling basin. Sediment sample S6 was collected at a depth of 6 to 8 inches from within a culvert located at the southwest end of the site.



SOURCE: Ecology and Environment, Inc. 1990.

SCALE

0 200 400 600 800 1,000 FEET

LEGEND

▲ SOIL

▼ SEDIMENT

FIGURE 3-2 SOIL/SEDIMENT SAMPLING LOCATIONS

Off-site sediment samples S3, S7, S8, S9, S10, and S11 were collected from the ditches and Rose Creek, which border the site on its north, west, and south sides. These samples were collected to characterize a potential migration pathway for TCL compounds and/or TAL analytes from the site via surface water.

Sediment sample S3 was obtained at a depth of approximately 6 inches from the ditch that runs from the north side of building #1 to the northwest side of the site, just prior to its confluence with the off-site ditch located on the west side of the site. Sediment sample S7 was collected at a depth of approximately 6 inches from the ditch located at the southwest corner of the site, just prior to its confluence with Rose Creek. Sediment sample S8 was collected at a depth of approximately 6 inches from this ditch just after its confluence with Rose Creek. Sediment sample S11 was obtained at a depth of approximately 1 foot from this ditch just prior to its reaching the northeast corner of the site.

Sediment sample S9 was collected at a depth of approximately 6 inches from the ditch located at the southeast corner of the site, just prior to its confluence with Rose Creek. Sediment sample S10 was obtained at a depth of approximately 1 foot from Rose Creek just prior to reaching the site at its southeast corner.

A potential background soil sample (indicated as S12) was collected on-site from beneath a tree in front of the old office building at the northeast corner of the site. The potential background soil sample was collected to determine the representative chemical content of the soil in the area surrounding the site. The location was chosen because the ground surface appeared to be in an undisturbed state.

All soil/sediment samples were obtained using a garden trovel or hand auger. Sample material was transferred to a stainless steel bowl, then placed in the sample bottles using the garden trowel (E & E 1987).

Standard E & E decontamination procedures were adhered to during the collection of all soil/sediment samples. The procedures included the scrubbing of all equipment with a solution of Alconox detergent and distilled water, and triple-rinsing the equipment with distilled water prior to the collection of each sample (E & E 1987).

All soil/sediment samples were packaged and shipped in accordance with U.S. EPA-required procedures. As directed by U.S. EPA, all soil/sediment samples were analyzed under the U.S. EPA Contract Laboratory Program (CLP) for TCL compounds by Wadsworth/Alert Laboratories, Inc., of Canton, Ohio, and for TAL analytes by Enseco/Rocky Mountain Analytical of Arvada, Colorado.

4. ANALYTICAL RESULTS

4.1 INTRODUCTION

This section includes results of chemical analysis of FIT-collected soil/sediment samples for TCL compounds and TAL analytes.

4.2 RESULTS OF CHEMICAL ANALYSIS OF FIT-COLLECTED SAMPLES

Chemical analysis of FIT-collected soil/sediment samples revealed substances from the following groups of TCL compounds and TAL analytes: aromatics, halogenated hydrocarbons, phenols, phthalates, halogenated aromatics, polyaromatic hydrocarbons (PAHs), pesticides, metals, heavy metals, cyanide, common laboratory artifacts (methylene chloride, acetone, 2-butanone, toluene, di-n-butylphthalate, butylbenzylphthalate, and bis[2-ethylhexyl]phthalate), and common soil constituents (see Table 4-1 for complete chemical analysis results of FIT-collected soil/sediment samples).

U.S. EPA CLP quantitation/detection limits used in the analysis of FIT-collected soil/sediment samples are provided in Appendix D.

Sample Collection Information and Parameters	S1	
Date	8/3/89	8/3
Time	1100	09
CLP Organic Traffic Report Number	EFA12	EF3
CLP Inorganic Traffic Report Number	MHEF12	MEF3
Compound Detected (values in ug/kg)		
Volatile Organics		
methylene chloride	6J	-
acetone	--	-
2-butanone (MEK)	--	-
benzene	--	-
tetrachloroethene	--	-
toluene	5J	1
ethylbenzene	--	-
xylenes (total)	--	-
Semivolatile Organics		
2,4-dichlorophenol	--	-
naphthalene	--	8
4-chloro-3-methylphenol	--	-
2-methylnaphthalene	--	4
acenaphthylene	--	4
acenaphthene	--	-
dibenzofuran	--	-
diethylphthalate	--	-
fluorene	--	-
hexachlorobenzene	--	9
phenanthrene	660	2
anthracene	130J	--
di-n-butylphthalate	--	-
fluoranthene	2,300	3
pyrene	3,900J	4
butylbenzylphthalate	160J	--
benzo[a]anthracene	1,000J	3
chrysene	2,000J	3
bis(2-ethylhexyl)phthalate	6,100J	1,4
benzo[b]fluoranthene	2,600J	4
benzo[k]fluoranthene	1,300J	3
benzo[a]pyrene	1,700J	2
indeno[1,2,3-cd]pyrene	1,400J	3
dibenzo[a,h]anthracene	240J	--
benzo[g,h,i]perylene	--	3

Table 4-1 (Cont.)

Sample Collection Information and Parameters	S1	
Pesticides/PCBs		
Heptachlor	--	-
Dieldrin	390	2
4,4'-DDD	--	-
4,4'-DDT	--	-
alpha Chlordane	--	-
gamma Chlordane	230J	-
Analyte Detected (values in mg/kg)		
aluminum	10,400	7,60
antimony	13.4B	-
arsenic	13.7JNWB	6.
barium	121	83.
beryllium	1.8	1.
cadmium	28.7	27.
calcium	163,000	172,00
chromium	51.6	4
cobalt	14	6.
copper	1,530JA	68
iron	21,800	18,50
lead	523JN	1,79
magnesium	8,690	6,69
manganese	3,980	2,65
mercury	0.43N	0.
nickel	59.4	3
potassium	6,310	3,98
selenium	--	--
silver	31.5JAN	2.
sodium	--	--
thallium	1.2J+B	--
vanadium	59.3	56.
zinc	8,210	27,40
cyanide	--	2.

-- Not detected.

Table 4-1 (Cont.)

COMPOUND QUALIFIERS

J	Indi
C	This quantitative. ≥10
D	This at a

ANALYTE QUALIFIERS

N	Spike possi See s
*	Dupli possi
+	Corre 0.995
B	Value
J	Value protoc
W	Post-c contrc spike

Source: Ecology and Environment, Inc. 1990.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section contains a discussion of data and information that apply to potential migration pathways and targets of TCL compounds and TAL analytes that may be attributable to the Swift Ag site. The five migration pathways of concern discussed are groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

No groundwater samples were collected during the SSI of the Swift Ag site because of the location of the site within the boundaries of an area serviced by the Illinois-American Water Company, which utilizes surface water as its source of drinking water (Illinois-American Water Company 1984). However, a potential exists for TCL compounds and/or TAL analytes to migrate from the site into groundwater, based on the history of the site as an active chemical processing facility, the geology in the area of the site, and the presence of TCL compounds and TAL analytes in the on-site soil/sediment samples collected by FIT.

TCL compounds and TAL analytes were detected in soil/sediment samples collected on-site. Specific compounds detected include Dieldrin at 4,000D µg/kg in S6, and gamma Chlordane at 230J µg/kg and 350J µg/kg in S1 and S6, respectively (see Table 4-1 for definition and interpretation of qualifiers). Lower concentrations of these compounds and analytes were also detected in other on-site samples collected by FIT. These compounds and analytes were detected at concentrations significantly

greater than those detected in the background soil sample (S12). Therefore, attribution of these compounds and analytes to the Swift Ag site is highly probable.

Other TCL compounds and TAL analytes detected in on-site soil/sediment samples were either not detected or were detected at lower concentrations in the background soil sample, S12. Among these are phenanthrene and other PAHs, zinc, lead, cadmium, and chromium. The presence of these compounds and analytes in on-site soil/sediment samples may also be attributable to the Swift Ag site. However, the presence of other industrial sources in the area, as well as nearby railroad tracks, may also be contributing sources of TCL compounds and/or TAL analytes detected in soils and sediments collected from the Swift Ag site.

The potential migration of TCL compounds and TAL analytes to groundwater is directly influenced by the geology of the area surrounding the site. The Swift Ag site is located in the American Bottoms Area of the Mississippi River Valley. The American Bottoms Area is a nearly level area of bottom land in the Mississippi River floodplain. Unconsolidated material in the area averages 120 feet and consists mainly of recent, fine-grained alluvial deposits (clays, silts, and fine sands) overlying glacial valley train deposits. The glacial deposits are predominantly medium-to-coarse sands and gravels, increasing in grain size with depth, and interbedded clay lenses. This glacial material provides most of the groundwater used in the area and comprises the aquifer of concern. According to area well logs, the depth to the aquifer of concern ranges from 30 to 110 feet (area well logs are provided in Appendix E).

Underlying the glaciofluvial material are Pennsylvanian bedrock layers of limestone and dolomite, with subordinate layers of shale and sandstone. The bedrock in this area is characterized by low permeability and poor water quality and is not an important aquifer (Illinois State Water Survey 1965).

According to well logs of the area, no continuous confining layer exists between the surface and the bedrock in the area of the site. Area well logs also indicate that well depths in the area of the site range from 30 to 110 feet.

Historically, groundwater flow in the area of the site was believed to be from north to south. However, heavy pumping of groundwater in the East St. Louis area has apparently resulted in a shift in groundwater flow to a northeast to southwest direction (Allied and General Chemical Corporations 1987).

Most of the population within a 3-mile radius of the site, including residents of the municipalities of East St. Louis and Washington Park, uses surface water obtained from the Mississippi River and purchased from Illinois-American Water Company as a drinking water source (Illinois-American Water Company 1984; Davis 1985; Olendorf 1985). However, approximately 4,235 people draw drinking water from private and municipal wells finished in the aquifer of concern within a 3-mile radius of the site. This figure includes those served by groundwater from the Mound Public Water system, which services approximately 2,500 people. The Mound Public Water wells are approximately 100 to 110 feet deep and are located approximately 2 1/2 miles northeast of the site (Strother 1985).

Using the United States Geological Survey (USGS) French Village, Monks Mound, Cahokia, and Granite City, Illinois quadrangle topographic maps (USGS 1954), 263 homes were counted within a 3-mile radius of the site. Using St. Clair County 1980 Census information (U.S. Bureau of the Census 1982), an average of 2.89 persons per household was used to calculate the population. Therefore, approximately 760 persons use private wells as a source of drinking water within a 3-mile radius of the site. Approximately 650 acres of land used for growing food crops are irrigated by groundwater from the aquifer of concern within a 3-mile radius of the site (Hardiman 1985, 1985a, 1985b; Metz 1985). Using a factor of 1.5 persons per acre, a population of 975 utilizes groundwater for irrigation in the site area. The total target population within a 3-mile radius of the site using groundwater from the aquifer of concern, then, is approximately 4,235.

5.3 SURFACE WATER

No surface water samples were collected as a part of the SSI of the Swift Ag site. However, the site is bounded on its north and west sides by drainage ditches. Rose Creek runs along the south boundary of the

site. Rose Creek, a manmade ditch that has been used in the past for wastewater discharges and storm water runoff, flows from the area of the site to Old Cahokia Creek, which lies approximately 1 mile northwest of the site.

Other surface water bodies located nearest to the Swift Ag site are Old Cahokia Creek and Schoenberger Creek, which lies approximately 3/4 miles to the south of the site. The Mississippi River, approximately 4 1/2 miles west of the site, is utilized for drinking water; however, the drinking water intakes in the Mississippi are more than 3 miles from the Swift Ag site.

A migration route does exist for TCL compounds and TAL analytes to migrate from the site by a surface water pathway. Culverts were observed leading from the site to the drainage ditches and to Rose Creek.

TCL compounds and TAL analytes were detected in sediment samples collected from the drainage ditches and from Rose Creek. Specific compounds detected include the pesticides gamma Chlordane at 1,700DJ µg/kg and 430DJ µg/kg in S3 and S7, respectively; and Dieldrin at 290 µg/kg and 340DJ µg/kg, also in S3 and S7, respectively. The concentrations of compounds detected in these samples were significantly greater than those detected in corresponding background sediment samples. These compounds were also detected at lower concentrations in on-site soil/sediment samples. Because pesticides and fertilizers are known to be present on-site, their presence in the drainage ditches is therefore attributable to the Swift Ag site.

5.4 AIR

A release of potential contaminants to the air was not documented during the SSI of the Swift Ag site. During the reconnaissance inspection, a reading above background was noted on FIT site-safety screening equipment. The presence of other industries in the area makes the source of this reading difficult to determine. Further air monitoring would be required to determine the exact source. Other FIT site-entry instruments (oxygen meter, explosimeter, hydrogen cyanide monitor, and radiation monitor) did not detect levels above background concentrations during the reconnaissance inspection. In accordance with

the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

Because of the presence of TCL compounds and TAL analytes in on-site surface soils, a potential exists for windblown particulates to carry TCL compounds and TAL analytes from the site. The population within a 4-mile radius of the site potentially affected by windblown particulates is approximately 64,830 persons. This figure was obtained by using USGS topographic maps (USGS 1954) to count 1,557 homes within a 4-mile radius of the site. Using St. Clair County 1980 Census information (U.S. Bureau of the Census 1982), an average of 2.89 persons per household was used to calculate a population of 4,500. This figure was added to the population of the city of Washington Park (approximately 7,830 persons), the population served by the Mound Public Water supply (2,500), and the population served by Collinsville Water Department (10,000), all of which lie within a 4-mile radius of the site. A planimeter was used to determine the portion of the population of East St. Louis which lies within a 4-mile radius of the site (40,000). The total air target population then, includes 64,830 persons within a 4-mile radius of the Swift Ag site.

5.5 FIRE AND EXPLOSION

FIT observations and explosimeter readings indicated no apparent potential for fire and/or explosion at the Swift Ag site.

5.6 DIRECT CONTACT

According to federal, state, and local file information, as revieved by FIT, no documentation exists of an incident of direct contact with TCL compounds or TAL analytes at the Swift Ag site.

A potential for the public to come into direct contact with TCL compounds and TAL analytes on-site does not exist because fencing completely surrounds the site.

There are currently 5 employees at the Swift Ag site. However, during peak operation, up to 25 workers may be employed at the site. A potential for these workers to come into direct contact with TCL compounds and TAL analytes does exist because these compounds and analytes were detected in on-site soil/sediment samples collected by FIT.

In addition, because TCL compounds and TAL analytes were detected in samples obtained from off-site drainage ditches and from Rose Creek, a potential does exist for the public to come into direct contact with these compounds and analytes.

The target population includes 8,954 persons living within a 1-mile radius of the site. This population was determined using a USGS topographic map of the area (USGS 1954) to determine the number of residences within a 1-mile radius of the site. This number was multiplied by the St. Clair County Census average of 2.89 persons per household. A planimeter was then used to determine the portion of the populations of East St. Louis and Washington Park that fall within a 1-mile radius of the site. These numbers were added together to determine the total direct contact target population of 8,954 persons.

6. REFERENCES

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_____, September 27, 1985b, University of Illinois Cooperative Extension Service, St. Clair County, Illinois, telephone conversation, contacted by Kevin Sobnosky of E & E.

Illinois-American Water Company, 1984, Distribution System Map, East St. Louis District, East St. Louis, Illinois.

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Strother, Rovedean, August 19, 1985, Mound Public Water District, State Park Place, Illinois, telephone conversation, contacted by Kevin Sobnosky of E & E.

U.S. Bureau of the Census, 1982, 1980 Census of Population, Volume I, Characteristics of the Population, Illinois.

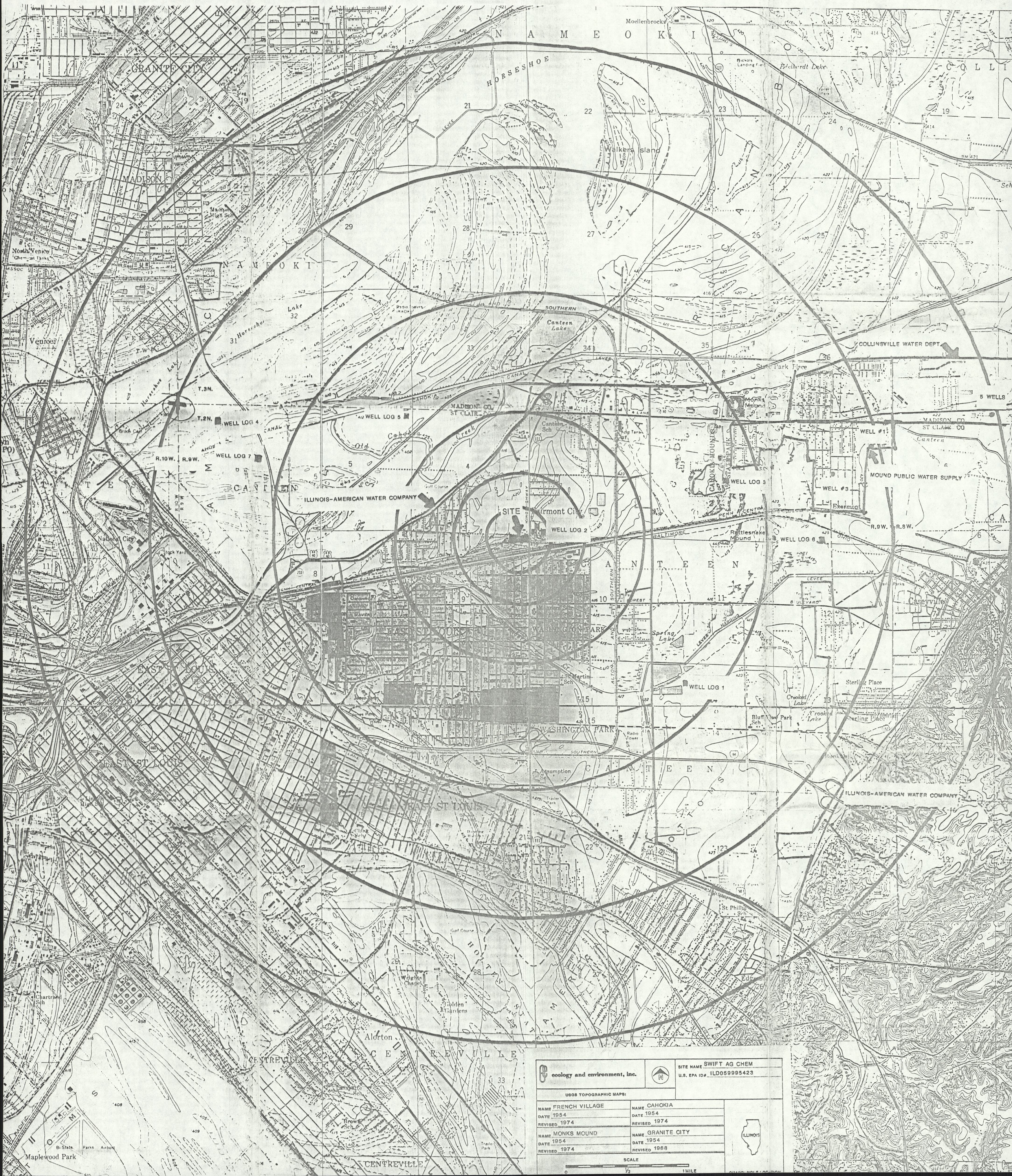
U.S. EPA, February 12, 1988, Office of Solid Waste and Emergency Response, Pre-Remedial Strategy for Implementing SARA, Directive number 9345.2-01, Washington, D.C.

USGS, 1954, French Village, Illinois Quadrangle, photorevised 1974; 1954, Cahokia, Illinois Quadrangle, photorevised 1974; 1954, Monks Mound, Illinois Quadrangle, photorevised 1974; 1954, Granite City, Illinois Quadrangle, photorevised 1968, 7.5 Minute Series: 1:24,000.

4156:1

APPENDIX A

SITE 4-MILE RADIUS MAP



ecology and environment, inc.

SITE NAME SWIFT AG CHEM

U.S. EPA ID# ILD059995423

USGS TOPOGRAPHIC MAPS:

NAME FRENCH VILLAGE DATE 1954 REVISED 1974	NAME CAHOKIA DATE 1954 REVISED 1974
NAME MONKS MOUND DATE 1954 REVISED 1974	NAME GRANITE CITY DATE 1954 REVISED 1968

ILLINOIS

SCALE

0 ½ 1 MILE

APPENDIX B

U.S. EPA FORM 2070-13

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D059995423

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER					
Swift Ag Chem. - Fairmont City Plant	2501 N. Kingshighway					
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
East St. Louis	IL	61107	St. Clair	163	21

09 COORDINATES: LATITUDE 38 52 58.0 | LONGITUDE 090 10 20.0

10 TYPE OF OWNERSHIP (Check one): ■ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
8, 2, 89 (MONTH DAY YEAR)	■ ACTIVE ☐ INACTIVE	1931 (BEGINNING YEAR) Present (ENDING YEAR) ☐ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ■ B. EPA CONTRACTOR Ecology & Environment, Inc. ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Regina Bayer	Water Chemist	E&E/FIT	(312)663-9415
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
William Perpich	Water Resource Manager	E&E/FIT	(312)663-9415
Jeff Dickson	Geologist	E&E/FIT	(312)663-9415
Ted Nehrkorn	Environmental Engineer	E&E/FIT	(312)663-9415
Dan Sullivan	Chemical Engineer	E&E/FIT	(312)663-9415
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Robert Britt	Plant Manager	Vigaro Industries Fairmont City, IL 62208	(618)271-1208
Scott A. Slagley	Consultant/ Hydrogeologist	Environmental Strategies Corp. Vienna, Virginia 22182	(703)821-3700
Richard W. Fields	Attorney	Arnold & Porter Washington D.C. 20036	(202)872-6720
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	0810 - 1545	hazy, sunny, temp. ~90°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Thomas Crause	IL. Environmental Protection Agency	(217)782-9848

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Karen M. Spangler	U.S. EPA	E&E/FIT	312-663-9415	11, 7, 89 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D059995123

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [x] A. SOLID
- [ ] B. POWDER, FINES
- [x] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [x] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS: Unknown
CUBIC YARDS: Unknown
NO. OF DRUMS: Unknown

03 WASTE CHARACTERISTICS (Check all that apply)

- [x] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [x] D. PERSISTENT
- [x] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [x] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	1,000	gal	Spill of oil in 1985.
SOL	SOLVENTS			
PSD	PESTICIDES	Unknown	Unknown	Formulated onsite.
OCC	OTHER ORGANIC CHEMICALS	Unknown	Unknown	Unknown.
IOC	INORGANIC CHEMICALS	Unknown	Unknown	Unknown.
ACD	ACIDS	2,000-3,000	gal.	H_2SO_4 spill - 1973.
BAS	BASES			
MES	HEAVY METALS	Unknown	Unknown	Unknown.

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	See Section 4 of narrative for details.				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	NA	NA	FDS	NA	NA
FDS	NA	NA	FDS	NA	NA
FDS	NA	NA	FDS	NA	NA
FDS	NA	NA	FDS	NA	NA

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT Site Inspection 1989.
E&E/FIT Files, Region V.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D059995123

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~4,235
04 NARRATIVE DESCRIPTION
See section 5.2 of narrative for details.

01 ■ B. SURFACE WATER CONTAMINATION — 02 ■ OBSERVED (DATE: 8/2/89) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0
04 NARRATIVE DESCRIPTION
See section 5.3 of narrative for details.

01 ■ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~61,830
04 NARRATIVE DESCRIPTION
See section 5.4 of narrative for details.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
See section 5.5 of narrative for details.

01 ■ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~89.54
04 NARRATIVE DESCRIPTION
See section 5.6 of narrative for details.

01 ■ F. CONTAMINATION OF SOIL — 02 ■ OBSERVED (DATE: 8/2/89) — ☐ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 10.2 (Acres)
04 NARRATIVE DESCRIPTION
See section 5.2 of narrative for details.

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~4,235
04 NARRATIVE DESCRIPTION
See section 5.2 of narrative for details.

01 ■ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 5
04 NARRATIVE DESCRIPTION
See section 5.6 of narrative for details.

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~61,830
04 NARRATIVE DESCRIPTION
See section 5.4 of narrative for details.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D059955123

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ■ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No damage to flora was observed during the site inspection. However, a potential for damage to flora does exist since TCL compounds and TAL analytes were detected in drainage ditches and Rose Creek, located adjacent to the site.

01 ■ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include named species)
No damage to fauna was observed during the site inspection. However, a potential for damage to fauna does exist since TCL compounds and TAL analytes were detected in drainage ditches and Rose Creek, located adjacent to the site.

01 ■ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Contamination of the food chain is possible due to the potential for migration of TCL compounds and TAL analytes into groundwater. Within a 4-mile radius of the site, ~650 acres of land are used for irrigation of food crops (sweet corn and horseradish).

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking containers) — 02 ■ OBSERVED (DATE: 8/2/89) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~41,880 — 04 NARRATIVE DESCRIPTION
See section 2.3 for details on past spills on-site.

01 ■ N. DAMAGE TO OFFSITE PROPERTY — 02 ■ OBSERVED (DATE: 8/2/89) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
TCL compounds and TAL analytes were detected in Rose Creek and several drainage ditches located adjacent to the site.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None observed.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
None noted.

III. TOTAL POPULATION POTENTIALLY AFFECTED: ~64,830

IV. COMMENTS
The East St. Louis area is very industrialized. Therefore, other potential sources of TCL compounds and TAL analytes may exist.

V. SOURCES OF INFORMATION (Cite specific references, e.g., State files, sample analysis, reports)
E;E/FIT Site Inspection 1989.
E;E/FIT Files, Region V.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D059995423

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
■ G. STATE (Specify) IEPA	7Z100690	7/17/89	7/17/91	Operating permit
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
■ A. SURFACE IMPOUNDMENT	1,000	gal
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
■ D. TANK, ABOVE GROUND	Unknown	Unknown
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
■ I. OTHER (Specify) settling basin	Unknown	

04 TREATMENT (Check all that apply)
- ☐ A. INCINERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify) none

05 OTHER
- ■ A. BUILDINGS ON SITE: ~15

06 AREA OF SITE: 10.2 (Acres)

07 COMMENTS
A: The above ground reservoir was used for deposition of wet scrubber slurry. Eventually, it was filled with solids, and its use was discontinued.
D: Approximately 15 different above ground storage tanks are located on-site. See section 2.3 of narrative for details.
I: The settling basin was used from 1973-1975 for deposition of wet scrubber slurry. Was covered with cinders upon discontinuation of its use.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)
☐ A. ADEQUATE, SECURE ☐ B. MODERATE ■ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.
The settling basin was lined with a naturally occurring clay layer.
Four of the above-ground storage tanks are surrounded by an earthen berm approximately 3 feet high.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ■ NO
02 COMMENTS: The site is completely fenced.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

E:E/FIT Site Inspection, 1989.
E:E/FIT Files, Region V.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D059995423

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ■	B. ■	A. ☐	B. ☐	C. ■	A. 2.5 (mi)
NON-COMMUNITY	C. ☐	D. ■	D. ☐	E. ☐	F. ☐	B. ~0.5 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ■ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER	03 DISTANCE TO NEAREST DRINKING WATER WELL
~4,235	~0.5 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
30-110 (ft)	SW	30-110 (ft)	UNK (gpd)	☐ YES ■ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)
See section 5.2 of narrative for details.

10 RECHARGE AREA		11 DISCHARGE AREA	
■ YES ☐ NO	COMMENTS: primary recharge through precipitation infiltration	■ YES ☐ NO	COMMENTS: potential discharge area for local groundwater flow is Schoenberger Creek

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

■ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Old Cahokia Creek	☐	~1 (mi)
Schoenberger Creek	☐	~0.75 (mi)
Rose Creek	☐	~0.1 (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. ~8954 NO. OF PERSONS	B. ~24860 NO. OF PERSONS	C. ~41880 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: ~1/8 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
~6,542	~500 ft (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site (e.g., rural, village, densely populated urban area))
The area to the west and south of the site is a densely populated urban area. The area to the north and east of the site is less densely populated with isolated areas of flood-prone lands.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D059995423

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ■ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ■ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
~80-140 (ft)	Unknown (ft)	Unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
-1 (in)	2.5 (in)	~1 %	S	~1 %

09 FLOOD POTENTIAL
SITE IS IN 100 YEAR FLOODPLAIN

10
NA ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)
ESTUARINE: A. NA (mi) OTHER: B. ~1 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
~1 (mi)
ENDANGERED SPECIES: Indiana Bat

13 LAND USE IN VICINITY
DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 0 (mi)	B. ~1/4 (mi)	C. NA (mi)	D. ~1/4 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY
Refer to 4-mile radius map - see Appendix A.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT Site Inspection, 1989.
E&E/FIT Files, Region V.
U.S. Climatic Atlas, 1979.
Soil Survey of St. Clair County.
U.S.G.S. Topographic Map - French Village, Monks Mound, Cahokia, and Granite City Quadrangles.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D059995423

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE		/	
AIR			
RUNOFF			
SPILL			
SOIL	12	TCL: Wadsworth/Alert Labs, Inc. Canton OH TAL: Enseco/RMAL Arvada CO	On File.
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Radiation Mini-Alert	No measurements above background.
Oxygen Meter	No measurements above background.
Explosimeter	No measurements above background.
Draeger pump w/ HCN tubes	No measurements above background.
OVA-128	15ppm methane detected at west end of plant.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND ☐ AERIAL

02 IN CUSTODY OF Ecology & Environment, Inc. Chicago, IL
(name of organization or individual)

03 MAPS ■ YES ☐ NO

04 LOCATION OF MAPS Ecology & Environment, Inc. Chicago, Illinois

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

None collected.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT Site Inspection, 1989.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D059995423

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Viqaro Industries				Savannah	GA	
NA						
NA						

PARENT COMPANY (if applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE
NA						
NA						
NA						
NA						

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Beatrice, Inc.						
Swift Company/Esmark						
Mobil Chemical Company						

IV. REALTY OWNER(S) (if applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
NA						
NA						
NA						

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT Site Inspection, 1989.
E&E/FIT Files, Region V.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D059995423

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Vigaro Industries	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
2501 N. Kingshighway	

05 CITY	06 STATE	07 ZIP CODE
East St. Louis	IL	61107

08 YEARS OF OPERATION	09 NAME OF OWNER
1986 - Present	Vigaro Industries

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER
NA	

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE
/		

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
Beatrice, Inc.		NA	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
1983 - 1986	

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
Swift & Company / Esmarck		NA	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
1971 - 1983	

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
Mobil Chemical Company		NA	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
1967 - 1971	

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E & E/FIT Site Inspection 1989.
E & E/FIT Files, Region II.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D059995423

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Vigaro Industries	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
2501 N. Kingshighway	

05 CITY	06 STATE	07 ZIP CODE
East St. Louis	IL	61107

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
NA		NA	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
NA		NA	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
NA		NA	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
NA		NA	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT Site Inspection, 1989.
E&E/FIT Files, Region II.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D059995423

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ F. WASTE REPACKAGED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ H. ON SITE BURIAL — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ L. ENCAPSULATION — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ N. CUTOFF WALLS — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
NA

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D059995123

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None known.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E & E/FIT Site Inspection, 1989.
E & E/FIT Files, Region V.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D059995123

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ■ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

See section 2.3 of narrative for details.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT Site Inspection 1989.
E&E/FIT Files, Region II.

APPENDIX C

FIT SITE PHOTOGRAPHS

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 1 OF 20

U.S. EPA ID: ILD059995123 TDD: F05-8612-077 PAN: FIL00555B

DATE: 8/2/89

TIME: 1216

DIRECTION OF PHOTOGRAPH: West - northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Sign at front/main entrance to plant.

DATE: 8/2/89

TIME: 1216

DIRECTION OF PHOTOGRAPH: West

WEATHER CONDITIONS: Sunny, hazy temp. ~ 90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Old office building to the left, main gate in foreground, new office building in the background.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 2 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1219

DIRECTION OF PHOTOGRAPH: Southwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Main plant building in the background, employee buildings in the right foreground.

DATE: 8/2/89

TIME: 1220

DIRECTION OF PHOTOGRAPH: West

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Drainage ditch located on the north side of the main plant building(s), building 1A is located on the right.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: SwiftAg Chem - Fairmont City Plant PAGE 3 OF 20

U.S. EPA ID: ILD059995123 TDD: F05-8612-077 PAN: FIL005553

DATE: 8/2/89

TIME: 1212

DIRECTION OF PHOTOGRAPH: Southwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Building 1A, empty anhydrous ammonia and sulfuric acid tanks located to the right, empty silos in the center.

DATE: 8/2/89

TIME: 1240

DIRECTION OF PHOTOGRAPH: South

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Four tanks located on the north side of the main plant building (tanks 12, 13, 14, 15).

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 4 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL00555B

DATE: 8/2/89

TIME: 1212

DIRECTION OF PHOTOGRAPH: West

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Paved area located north of the main plant building, location of the former settling basin.

DATE: 8/2/89

TIME: 1218

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Tire retreading facility located adjacent to the site on the north side.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem-Fairmont City Plant PAGE 5 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1400

DIRECTION OF PHOTOGRAPH: West

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: View of the south side of the main plant building from the southeast corner of the site.

DATE: 8/2/89

TIME: 1400

DIRECTION OF PHOTOGRAPH: North-northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: View of the east side of the main plant building from the southeast corner of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 6 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1305

DIRECTION OF PHOTOGRAPH: East-northeast

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Gate located at the southwest corner of the site.

DATE: 8/2/89

TIME: 1500

DIRECTION OF PHOTOGRAPH: East

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: View of the west side of the main plant building and propane tank.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 7 OF 20

U.S. EPA ID: ILD059995123 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1305

DIRECTION OF PHOTOGRAPH: East

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Ditch located adjacent to the site on the south.

DATE: 8/2/89

TIME: 1305

DIRECTION OF PHOTOGRAPH: West

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Ditch located adjacent to the site on the north from the northeast corner of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 8 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055513

DATE: 8/2/89

TIME: 1305

DIRECTION OF PHOTOGRAPH: East-northeast

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Ditch located adjacent to the site on the northwest from the southwest corner of the site.

DATE: 8/2/89

TIME: 1455

DIRECTION OF PHOTOGRAPH: Southwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): NA

DESCRIPTION: Old reservoir in background, which was utilized for deposition of scrubber slurry.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 9 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1100

DIRECTION OF PHOTOGRAPH: East - southeast

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S1

DESCRIPTION: Soil sample S1.

Close-up view.

DATE: 8/2/89

TIME: 1100

DIRECTION OF PHOTOGRAPH: East - southeast

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S1

DESCRIPTION: Soil sample S1.

Perspective view. Composite surface soil sample collected near the hopper loading dock on the north side of the main plant building(1).

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 10 OF 20

U.S. EPA ID: ILD059995123 TDD: F05-8612-077 PAN: FIL00555B

DATE: 8/2/89

TIME: 1110

DIRECTION OF PHOTOGRAPH: North

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S2

DESCRIPTION: Soil sample S2.

Perspective view. Surface soil sample collected between the dust suppressant oil tank and the main plant building (1).

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 11 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1130

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~ 90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S3

DESCRIPTION: Soil sample S3.

Close-up view.

DATE: 8/2/89

TIME: 1130

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~ 90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S3

DESCRIPTION: Soil sample S3.

Perspective view. Sediment sample collected from a ditch near the northwest corner of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 12 OF 20

U.S. EPA ID: ILD059995123 TDD: F05-8612-077 PAN: FIL00555B

DATE: 8/2/89

TIME: 1140

DIRECTION OF PHOTOGRAPH: East

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S4

DESCRIPTION: Soil sample S4. Close-up view.

DATE: 8/2/89

TIME: 1140

DIRECTION OF PHOTOGRAPH: East

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S4

DESCRIPTION: Soil sample S4. Perspective view. Surface soil sample collected from within the old reservoir used for deposition of the wet scrubber slurry.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 13 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL005553

DATE: 8/2/89

TIME: 1235

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~ 90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): 55

DESCRIPTION: Soil sample 55.

Close-up view.

DATE: 8/2/89

TIME: 1235

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): 55

DESCRIPTION: Soil sample 55.

Perspective view. Surface soil sample collected from the location of the former settling basin.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 14 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL00555B

DATE: 8/2/89

TIME: 1250

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S6

DESCRIPTION: Soil sample S6.

Close-up view.

DATE: 8/2/89

TIME: 1250

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S6

DESCRIPTION: Soil sample S6.

Perspective view. Sediment sample collected from a culvert located near the west edge of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 15 OF 20

U.S. EPA ID: ILD059995123 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1305

DIRECTION OF PHOTOGRAPH: North

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S7

DESCRIPTION: Soil sample S7.

Close-up view.

DATE: 8/2/89

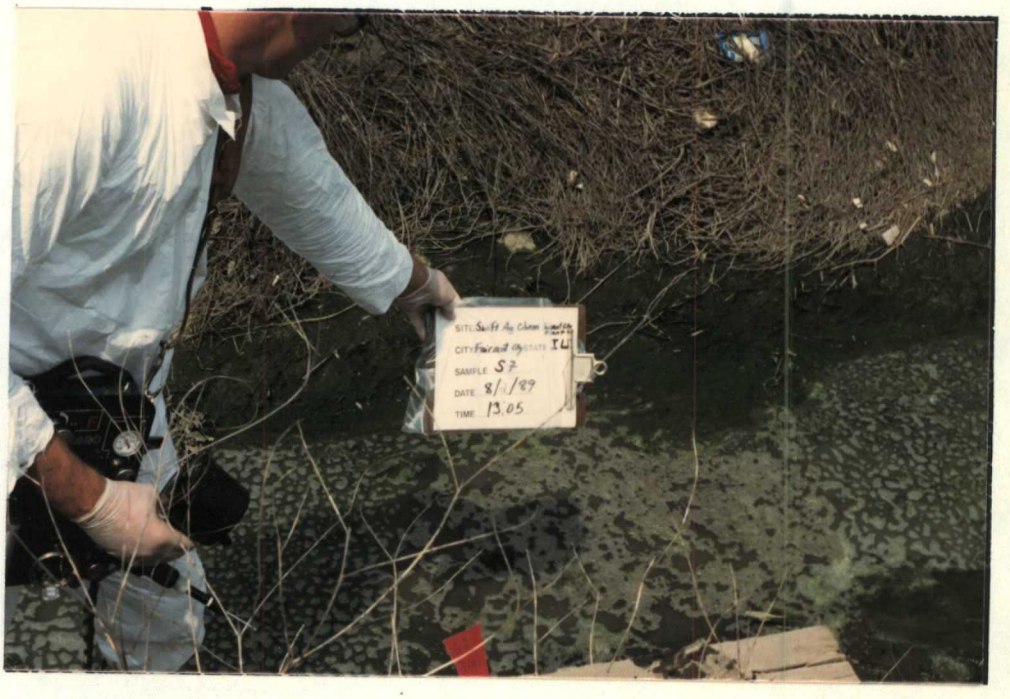
TIME: 1305

DIRECTION OF PHOTOGRAPH: North

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S7



DESCRIPTION: Soil sample S7.

Perspective view. Sediment sample collected from a ditch located at the southwest corner of the site prior to its confluence with a ditch located on the south side of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 16 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1315

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Sunny, hazy temp. ~ 90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S8

DESCRIPTION: Soil sample S8.

Perspective view. Sediment sample collected from a ditch located at the southwest corner of the site just after its confluence with a ditch located on the south side of the plant.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 17 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL00555B

DATE: 8/2/89

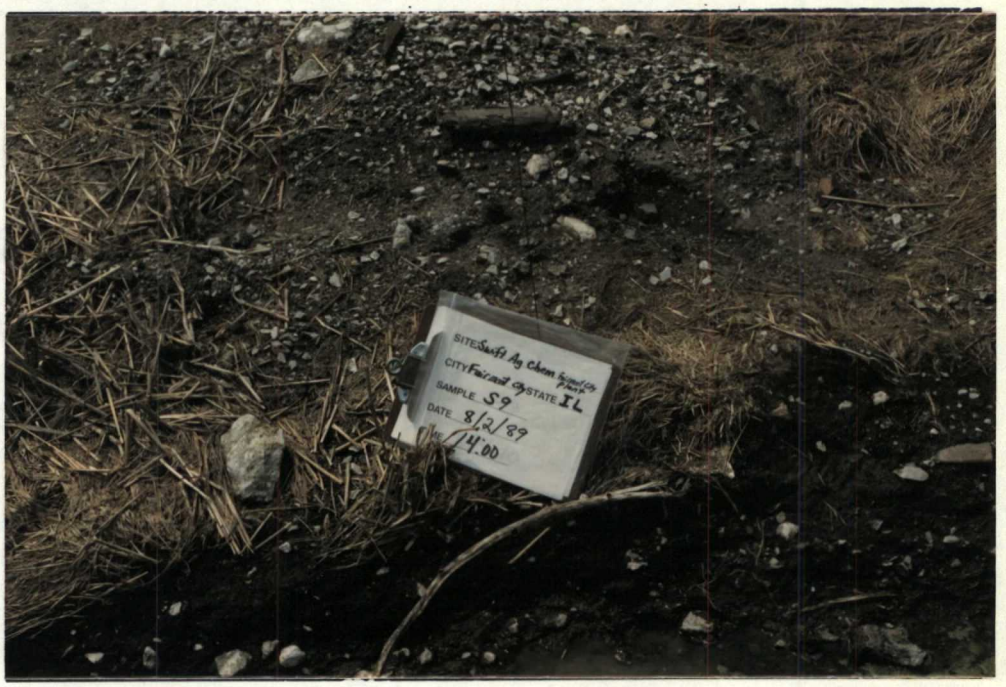
TIME: 1400

DIRECTION OF PHOTOGRAPH: West

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S9



DESCRIPTION: Soil sample S9.

Close-up view.

DATE: 8/2/89

TIME: 1400

DIRECTION OF PHOTOGRAPH: North

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S9

DESCRIPTION: Soil sample S9.

Perspective view. Sediment sample collected from a ditch located at the southeast corner of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 18 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL00555B

DATE: 8/2/89

TIME: 1410

DIRECTION OF PHOTOGRAPHY: North

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S10

DESCRIPTION: Soil sample S10.

Close-up view.

DATE: 8/2/89

TIME: 1410

DIRECTION OF PHOTOGRAPHY: East

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S10

DESCRIPTION: Soil sample S10.

Perspective view. Sediment sample collected from a ditch located along the south side of the site, collected prior to its reaching the east boundary of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 19 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1430

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S11

DESCRIPTION: Soil sample S11.

Close-up view.

DATE: 8/2/89

TIME: 1430

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S11

DESCRIPTION: Soil sample S11.

Perspective view. Sediment sample collected offsite, from a ditch located on the north side of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Swift Ag Chem - Fairmont City Plant PAGE 20 OF 20

U.S. EPA ID: ILD059995423 TDD: F05-8612-077 PAN: FIL0055SB

DATE: 8/2/89

TIME: 1435

DIRECTION OF PHOTOGRAPH: Southwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S12

DESCRIPTION: Soil sample S12.

Close-up view.

DATE: 8/2/89

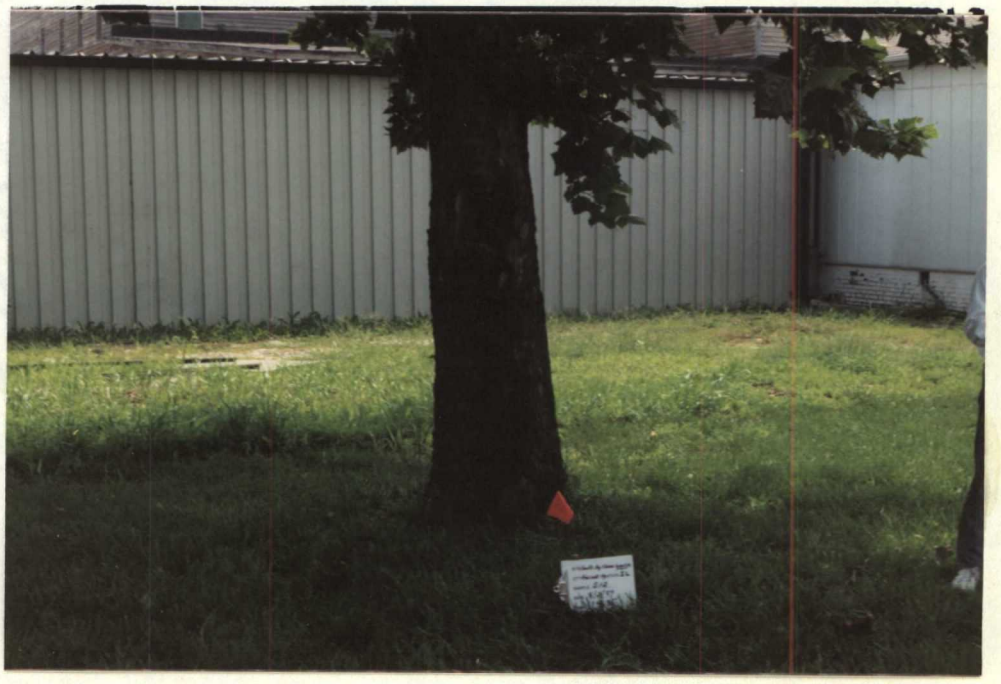
TIME: 1435

DIRECTION OF PHOTOGRAPH: Southwest

WEATHER CONDITIONS: Sunny, hazy temp. ~90°F

PHOTOGRAPHED BY: Regina Bayer

SAMPLE ID (if applicable): S12



DESCRIPTION: Soil sample S12.

Perspective view. Surface soil sample collected from the east side of the site, near the old office building.

APPENDIX D

U.S. EPA TARGET COMPOUND LIST AND TARGET ANALYTE LIST QUANTITATION/DETECTION LIMITS

Contract Laboratory Program
Target Compound List
Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Chloromethane	74-87-3	10 ug/L	10 ug/Kg
Bromomethane	74-83-9	10	10
Vinyl chloride	75-01-4	10	10
Chloroethane	75-00-3	10	10
Methylene chloride	75-09-2	5	5
Acetone	67-64-1	10	5
Carbon disulfide	75-15-0	5	5
1,1-dichloroethene	75-35-4	5	5
1,1-dichloroethane	75-34-3	5	5
1,2-dichloroethene (total)	540-59-0	5	5
Chloroform	67-66-3	5	5
1,2-dichloroethane	107-06-2	5	5
2-butanone (MEK)	78-93-3	10	10
1,1,1-trichloroethane	71-55-6	5	5
Carbon tetrachloride	56-23-5	5	5
Vinyl acetate	108-05-4	10	10
Bromodichloromethane	75-27-4	5	5
1,2-dichloropropane	78-87-5	5	5
cis-1,3-dichloropropene	10061-01-5	5	5
Trichloroethene	79-01-6	5	5
Dibromochloromethane	124-48-1	5	5
1,1,2-trichloroethane	79-00-5	5	5
Benzene	71-43-2	5	5
Trans-1,3-dichloropropene	10061-02-6	5	5
Bromoform	75-25-2	5	5
4-Methyl-2-pentanone	108-10-1	10	10
2-Hexanone	591-78-6	10	10
Tetrachloroethene	127-18-4	5	5
Tolene	108-88-3	5	5
1,1,2,2-tetrachloroethane	79-34-5	5	5
Chlorobenzene	108-90-7	5	5
Ethyl benzene	100-41-4	5	5
Styrene	100-42-5	5	5
Xylenes (total)	1330-20-7	5	5

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Phenol	108-95-2	10 ug/L	330 ug/Kg
bis(2-Chloroethyl) ether	111-44-4	10	330
2-Chlorophenol	95-57-8	10	330
1,3-Dichlorobenzene	541-73-1	10	330
1,4-Dichlorobenzene	106-46-7	10	330
Benzyl Alcohol	100-51-6	10	330
1,2-Dichlorobenzene	95-50-1	10	330
2-Methylphenol	95-48-7	10	330
bis(2-Chloroisopropyl) ether	108-60-1	10	330
4-Methylphenol	106-44-5	10	330
N-Nitroso-di-n-dipropylamine	621-64-7	10	330
Hexachloroethane	67-72-1	10	330
Nitrobenzene	98-95-3	10	330
Isophorone	78-59-1	10	330
2-Nitrophenol	88-75-5	10	330
2,4-Dimethylphenol	105-67-9	10	330
Benzoic Acid	65-85-0	50	1600
bis(2-Chloroethoxy) methane	111-91-1	10	330
2,4-Dichlorophenol	120-83-2	10	330
1,2,4-Trichlorobenzene	120-82-1	10	330
Naphthalene	91-20-3	10	330
4-Chloroaniline	106-47-8	10	330
Hexachlorobutadiene	87-68-3	10	300
4-Chloro-3-methylphenol	59-50-7	10	330
2-Methylnaphthalene	91-57-6	10	330
Hexachlorocyclopentadiene	77-47-4	10	330
2,4,6-Trichlorophenol	88-06-2	10	330
2,4,5-Trichlorophenol	95-95-4	50	1600
2-Chloronaphthalene	91-58-7	10	330
2-Nitroaniline	88-74-4	50	1600
Dimethylphthalate	131-11-3	10	330
Acenaphthylene	208-96-8	10	330
2,6-Dinitrotoluene	606-20-2	10	330
3-Nitroaniline	99-09-2	50	1600
Acenaphthene	83-32-9	10	330
2,4-Dinitrophenol	51-28-5	50	1600
4-Nitrophenol	100-02-7	50	1600
Dibenzofuran	132-64-9	10	330
2,4-Dinitrotoluene	121-14-2	10	330
Diethylphthalate	84-66-2	10	330
4-Chlorophenyl-phenyl ether	7005-72-3	10	330

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SLUDGE SEDIMENT
Fluorene	86-73-7	10 ug/L	330 ug/Kg
4-Nitroaniline	100-01-6	50	1600
4,6-Dinitro-2-methylphenol	534-52-1	50	1600
N-nitrosodiphenylamine	86-30-6	10	330
4-Bromophenyl-phenylether	101-55-3	10	330
Hexachlorobenzene	118-74-1	10	330
Pentachlorophenol	87-86-5	50	1600
Phenanthrene	85-01-8	10	330
Anthracene	120-12-7	10	330
Di-n-butylphthalate	84-74-2	10	330
Fluoranthene	206-44-0	10	330
Pyrene	129-00-0	10	330
Butylbenzylphthalate	85-68-7	10	330
3,3'-Dichlorobenzidine	91-94-1	20	660
Benzo(a)anthracene	56-55-3	10	330
Chrysene	218-01-9	10	330
bis(2-Ethylhexyl)phthalate	117-81-7	10	330
Di-n-octylphthalate	117-84-0	10	330
Benzo(b)fluoranthene	205-99-2	10	330
Benzo(k)fluoranthene	207-08-9	10	330
Benzo(a)pyrene	50-32-8	10	330
Indeno(1,2,3-cd)pyrene	193-39-5	10	330
Dibenz(a,h)anthracene	53-70-3	10	330
Benzo(g,h,i)perylene	191-24-2	10	330

Table A (Cont.)

CONTRACT LABORATORY PROGRAM

TARGET ANALYTE LIST (TAL)

INORGANIC DETECTION LIMITS

Compound	Procedure	Detection Limits Water (µg/L)	Detection Limits Soil Sediment Sludge (mg/kg)
aluminum	ICP	200	40
antimony	furnace	60	2.4
arsenic	furnace	10	2
barium	ICP	200	40
beryllium	ICP	5	1
cadmium	ICP	5	1
calcium	ICP	5,000	1,000
chromium	ICP	10	2
cobalt	ICP	50	10
copper	ICP	25	5
iron	ICP	100	20
lead	furnace	5	1
magnesium	ICP	5,000	1,000
manganese	ICP	15	3
mercury	cold vapor	0.2	0.008
nickel	ICP	40	8
potassium	ICP	5,000	1,000
selenium	furnace	5	1
silver	ICP	10	2
sodium	ICP	5,000	1,000
thallium	furnace	10	2
tin	ICP	40	8
vanadium	ICP	50	10
zinc	ICP	20	4
cyanide	color	10	2

3767:1

Table A
Contract Laboratory Program
Target Compound List
Pesticide and PCB Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
alpha-BHC	319-84-6	0.05 ug/L	8 ug/Kg
beta-BHC	319-85-7	0.05	8
delta-BHC	319-86-8	0.05	8
gamma-BHC (Lindane)	58-89-9	0.05	8
Heptachlor	76-44-8	0.05	8
Aldrin	309-00-2	0.05	8
Heptachlor epoxide	1024-57-3	0.05	8
Endosulfan I	959-98-8	0.05	8
Dieldrin	60-57-1	0.10	16
4,4'-DDE	72-55-9	0.10	16
Endrin	72-20-8	0.10	16
Endosulfan II	33213-65-9	0.10	16
4,4'-DDD	72-54-8	0.10	16
Endosulfan sulfate	1031-07-8	0.10	16
4,4'-DDT	50-29-3	0.10	16
Methoxychlor (Mariate)	72-43-5	0.5	80
Endrin ketone	53494-70-5	0.10	16
alpha-Chlordane	5103-71-9	0.5	80
gamma-chlordane	5103-74-2	0.5	80
Toxaphene	8001-35-2	1.0	160
AROCLOR-1016	12674-11-2	0.5	80
AROCLOR-1221	11104-28-2	0.5	80
AROCLOR-1232	11141-16-5	0.5	80
AROCLOR-1242	53469-21-9	0.5	80
AROCLOR-1248	12672-29-6	0.5	80
AROCLOR-1254	11097-69-1	1.0	160
AROCLOR-1260	11096-82-5	1.0	160

APPENDIX E

WELL LOGS OF THE AREA OF THE SITE

Walker

FRANK G. TOJO
7600 Caseyville Road
St. Clair County

Well Number..... No.1

Owned by..... Frank G. Tojo
7600 Caseyville Road, East St. Louis

Date drilled..... September 17, 1964

Drilled by..... Luhr Bros. Inc. Columbia, Illinois

Depth of hole..... 116.7 ft below ground surface.

Diameter of hole... 32 inches

Depth of well..... 116 ft below ground surface.

Casing..... 83 feet of 16-inch steel pipe. Top of casing extends 3 feet above ground surface.

Screen..... 36 feet of Doerr, 16-inch screen with bottom set at 116 feet below ground surface. Gravel-packed with Merramec gravel.

Location of well... 150 feet North of Old Caseyville Road and 150 feet South of Harding Ditch, approximately 1450 feet East and 225 feet South of the North-west corner of Section 14 T.2 N. R.9 W.

Log of well..... As classified by the driller:
0 to 15 feet. Clay
15 to 20 feet. Fine sand, gray.
20 to 25 feet. Coarse sand with 1/4" gravel.
25 to 30 feet. Clay, silty, with very coarse sand.
30 to 35 feet. Sand with some clay.
35 to 116.5 feet. Coarse sand with gray clay lenz.

Pump..... Permanent pump has been installed. It is a Worthington turbine, powered by an Allis Chalmers, butane, engine. The pump setting is as follows:
40 feet of 8-inch column pipe.
4 feet of 3stage, 12-inch bowl assembly.
10 feet of 8-inch tail pipe.
54 feet total length of pump setting.

Static level..... 16.77 feet (when drilled as reported by the driller)

Pumping level..... 28.87 feet (when drilled as reported by the driller) This level was after pumping at 1270 gpm but the length of time pumped is not known.

Well used for..... Mr. Tojo raises fish for bait and uses the well to supply water to two ponds, one is of 1 acre surface and the other is 2 1/2 acre surface.
A water sample was collected January 22, 1966 for mineral, analysis. The sample expressed to State Water Survey Laboratory, Champaign, Illinois.

S. H. Jones

WELL INVENTORY SCHEDULE

Well No. ________ Owner's No. ________

Location ________ County ________

Section ________ Twp. No. ________ Range ________

Feet from Sec. Cor. ________

Owner Allied Chemical Address ________

Driller ________ Address ________

Date drilled 1966 Method ________

Depth 115' Hole record 38"

Casing record 20" ... 94.6' ...

Screen record ... 20" 94.6-115'

Gravel pack: ...

Log ________ Drill cuttings — Sample set no. —

Chief aquifer ________ from ________ to ________ Other aquifer ________

Land surface elev. ________ Topography ________

Nonpumping level ________ above / below measuring point on ________ (date) at ________ AM / PM

Pumping level ________ above / below measuring point after pumping at ________ gpm for ________ hours on ________ (date) at ________ AM / PM

Measuring point (MP) for above measurements ________

Airline and measuring equipment ________

Pump and power ________

Use of water ________

Water quality ________

Analysis No. and date ________ Temp. 57 °F

Data collected by ________ Date 10-7-82

Source of information ________

Can well be used in pumping test? — Are nearby observation wells available? ________ Are pumping records available? ________

Are water level records available? ________

Remarks:

Log	
0-7	Top Alum sand white
7-29	Clay
29-31	Fine sand, brown
31-37	Clay
37-74	sand
74-115	sand coarse

Copies

1- Dave Gerhardt
Allied Chemical Corp.
[illegible]
E. St. Louis, Illinois - 6220

1- R.J. Schicht (SWS)

1- W. H. [illegible] (SWS)
Collinsville

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth 63 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift ____. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building ____ Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes Y No ____
4. Date well completed Nov 15
5. Permanent Pump Installed? Yes ____ No Y
   Manufacturer ____ Type ____
   Capacity ____ gpm. Depth of setting ____ ft.
6. Well Top Sealed? Yes Y No ____
7. Pitless Adaptor Installed? Yes ____ No ____
8. Well Disinfected? Yes X No ____
9. Water Sample Submitted? Yes X No ____

REMARKS:

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Thomas Nagle (9 Florence) Well No. 33
    Address 1900 Dunham Road
    Driller D+S Drilling License No. 171
11. Permit No. 26727 Date Nov 27-1923
12. Water from Loose Sand (Formation) at depth 12 to 63 ft.
13. County St Clair
    Sec. 14.3d
    Twp. 2N
    Rge. 9W
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 5 ft. Slot ____

SHOW LOCATION IN SECTION PLAT
NE NW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6¼	16	0	63

16. Size Hole below casing: 6¼ in.
17. Static level 12 ft. below casing top which is ____ ft. above ground level. Pumping level 15 ft. when pumping at 10 gpm for 10 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Overburden	12	12
Loose sand	51	63

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE Dec 30 1923

WELL LOG 3

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored X. Hole Diam. 36 in. Depth 70 ft.
   Curb material ____. Buried Slab: Yes ____ No X
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ____. Finished in Drift ____. In Rock ____.
   Tubular ____. Gravel Packed X.
   d. Grout:

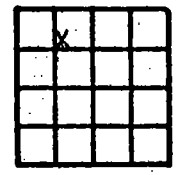
(KIND)	FROM (Ft.)	TO (Ft.)
gravel	70	10
concrete	10	0

2. Distance to Nearest:
   Building ok Ft. Seepage Tile Field ok
   Cess Pool ok Sewer (non Cast iron) ok
   Privy ok Sewer (Cast iron) ok
   Septic Tank ok Barnyard ok
   Leaching Pit ok Manure Pile ok
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed Nov. 6, 1980
5. Permanent Pump Installed? Yes ____ Date ____ No X
   Manufacturer ____ Type ____ Location ____
   Capacity ____ gpm. Depth of Setting ____ Ft.
6. Well Top Sealed? Yes X No ____ Type concrete cap
7. Pitless Adapter Installed? Yes ____ No ____
   Manufacturer ____ Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes ____ No ____
10. Pressure Tank Size ____ gal. Type ____
    Location ____
11. Water Sample Submitted? Yes ____ No X

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Farmers Energy Corp. Well No. ____
    Address Box #176, National City, Ill.
    Driller Clarence Kohnen License No. 102-30
11. Permit No. #96992 Date Oct. 28, 1980
12. Water from sand & gravel Formation
    at depth 32 to 70 ft.
13. County St. Clair
    Sec. 6. 6a
    Twp. 2 N
    Rge. 9 W
    Elev. X
14. Screen: Diam. ____ in.
    Length: ____ ft. Slot ____



SHOW LOCATION IN SECTION PLAT 89 W, 92 W, SE/c S W NE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
36	concrete pipe	0+1	70

16. Size Hole below casing: ____ in.
17. Static level ____ ft. below casing top which is ____ ft. above ground level. Pumping level ____ ft. when pumping at ____ gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
top soil brown	2	2
dark clay	4	6
dark clay – sand	24	30
dark gray sand – fine	5	35
gray sand & gravel	31	66
gray clay – sand & gravel	2	68
redish gray sand & gravel	2	70

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Clarence Kohnen DATE 10-5-80
mk

IDPH 4.065
1/74 – KNB-1

WELL LOG 4

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

TRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ___. Bored ✓. Hole Diam. 30 in. Depth 29 ft.
   Curb material ___. Buried Slab: Yes ___ No ___
   b. Driven ___. Drive Pipe Diam. ___ in. Depth ___ ft.
   c. Drilled ___. Finished in Drift ___. In Rock ___.
   Tubular ___. Gravel Packed ✓.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 25 Ft. Seepage Tile Field ___
   Cess Pool ___ Sewer (non Cast iron) ___
   Privy ___ Sewer (Cast iron) ___
   Septic Tank NO Barnyard ___
   Leaching Pit ___ Manure Pile ___
3. Well furnishes water for human consumption? Yes ✓ No ___
4. Date well completed ___
5. Permanent Pump Installed? Yes ___ Date ___ No ✓
   Manufacturer ___ Type ___ Location ___
   Capacity ___ gpm. Depth of Setting ___ Ft.
6. Well Top Sealed? Yes ✓ No ___ Type ___
7. Pitless Adapter Installed? Yes ___ No ✓
   Manufacturer ___ Model Number ___
   How attached to casing? ___
8. Well Disinfected? Yes ✓ No ___
9. Pump and Equipment Disinfected? Yes ___ No ___
10. Pressure Tank Size ___ gal. Type ___
    Location ___
11. Water Sample Submitted? Yes ___ No ✓

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner John Hogan Well No. ___
    Address East St. Louis Ill.
    Driller Gust Bakenhus License No. 92-472
11. Permit No. 36236 Date ___
12. Water from Clay (Formation) 13. County St. Clair
    at depth ___ to ___ ft.
14. Screen: Diam. ___ in.
    Length: ___ ft. Slot ___
    Sec. 5 1/4
    Twp. 2N
    Rge. 9W
    Elev. ___

SHOW LOCATION IN SECTION PLAT
NE NE NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
30	Concrete	30	

16. Size Hole below casing: ___ in.
17. Static level ___ ft. below casing top which is ___ ft. above ground level. Pumping level ___ ft. when pumping at ___ gpm for ___ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	29	

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Gus E. Bakenhus DATE 3-2-76

IDPH 4.065
1/74 – KNB-1

WELL LOG 5

INSTRUCTIONS TO DRILLERS

ite Copy –
Ill. Dept. of Public Health
allow Copy – Well Contractor
ue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUIRED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled X. Finished in Drift____. In Rock____.
   Tubular____. Gravel Packed X.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Cuttings	0	80

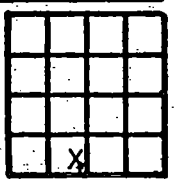
2. Distance to Nearest:
   Building____Ft. Seepage Tile Field____
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank____ Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes X No____
4. Date well completed 7-24-81
5. Permanent Pump Installed? Yes X Date 7-31-81 No____
   Manufacturer Sta-Rite Type Subm. Location Well
   Capacity 10 gpm. Depth of Setting 60 Ft.
6. Well Top Sealed? Yes X No____ Type____
7. Pitless Adapter Installed? Yes X No____
   Manufacturer Merrill Model Number MBP
   How attached to casing? Bolted
8. Well Disinfected? Yes X No____
9. Pump and Equipment Disinfected? Yes X No____
10. Pressure Tank Size 82 gal. Type Captive air
    Location in building
11. Water Sample Submitted? Yes____ No X

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Steve Cunningham

10. Property owner Metro East Auto Salvage Well No.____
    Address 2450 Black Lane, Caseyville, Ill 62232
    Driller St. Charles Drilling Co License No. 092006535 C.P. Chitwood
11. Permit No. 100466 Date 7/9/81
12. Water from Gravel (Formation)
    at depth 80 to 84 ft.
13. County St. Clair
    Sec. 1-5a
    Twp. 2 N
    Rge. 9 W
    Elev.____



SHOW LOCATION IN SECTION PLAT

14. Screen: Diam. 6 in.
    Length: 4 ft. Slot____
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
8@ 6"	19 # Steel	0	80

50'N 100'W SE/c SW

(household + commercial operation)

16. Size Hole below casing: 6 in.
17. Static level____ft. below casing top which is 1 ft. above ground level. Pumping level____ft. when pumping at 100 gpm for____hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	40	40
Sand	30	70
Gravel	14	84

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

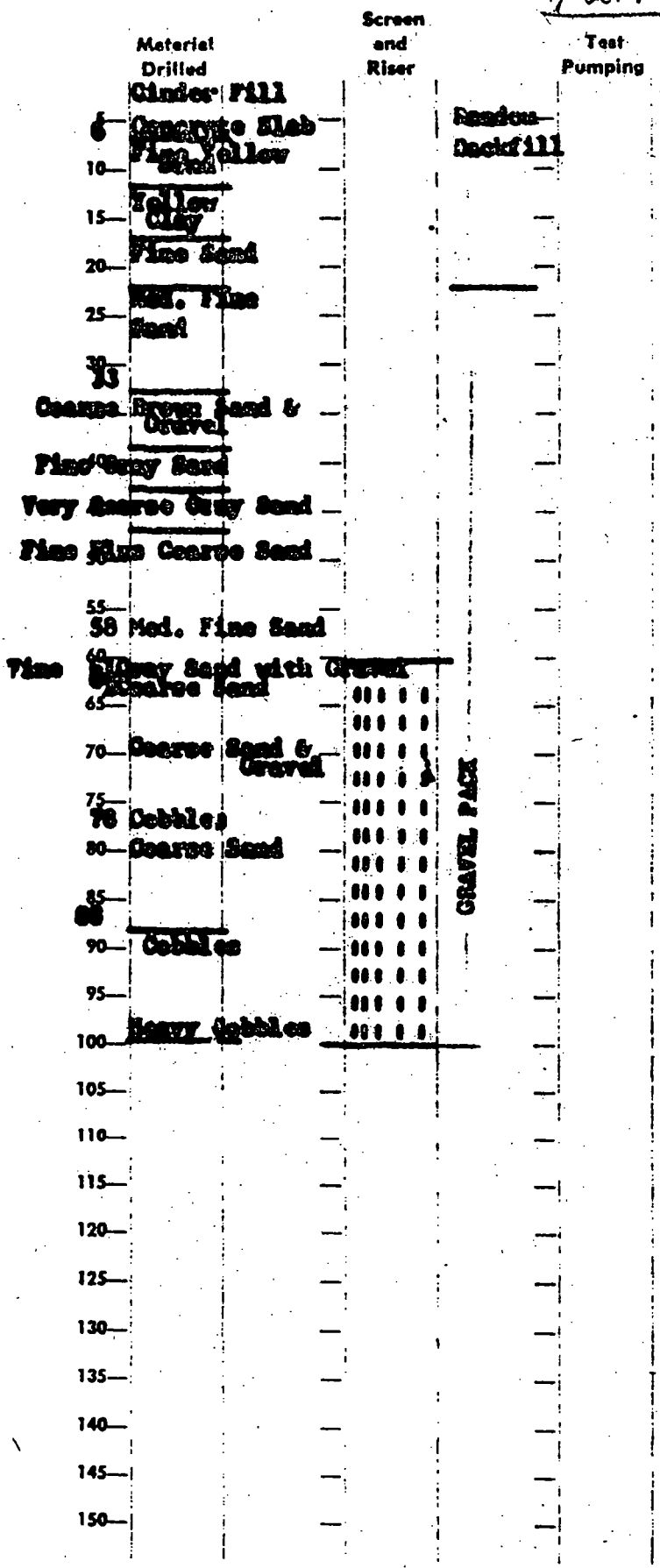
SIGNED C. P. Chitwood DATE 8/27/81

WELL LOG 6

IDPH 4.065
1/74 – KNB-1

St. Clair County Basic Data Folder
T2N R9W Sec 6

WELL NO. New #7
St Cl 2-N



Name Hunter Packing

Location East St. Louis, Illinois (Parking Lot)

Date 3-22-57

Well Depth 100.0'

Casing Size 16"

Length - Screen 40' - 1/4" slot, Steel 3/16"

Length - Riser 61.5' - 1/4" steel, 1.5' above grade

Tons Gravel 18 - 16 Tons

Static Water Level 50'

Equipment Used: Hours Run:

International , Frank's Drill Rig

Driller: M. Frank